

# YOSEMITE JUNIOR NATURE NOTES



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YOSEMITE NATIONAL  
PARK, CALIFORNIA

This is the second issue of the YOSEMITE JUNIOR NATURE NOTES for the summer of 1938. The first issue contained articles that were written mostly by the senior members of the school while this number will be made up largely of articles that have been written by the junior members of the school. The intent of this paper is to show what impressions and ideas about Yosemite and nature are obtained by the younger people during their stay in Yosemite and from their contact with the work of the Junior Nature School.

The Yosemite Junior Nature School is conducted for six weeks each summer as part of the Naturalist program to aid in training children in the field of nature and facts about our National Parks. It is believed that the facts of nature and of our natural heritage can best be taught to people during their younger years. The Yosemite Junior Nature School is conducted by the Naturalist Division of the National Park Service under the Department of Interior without charge for all those who visit the park and are willing to attend.

Those young people who are especially interested in nature work and have been attending for two or more summers have trained themselves by special work to become leaders of the school. These young people are called Junior Leaders and are very important for their work with the school, for the help they give the younger people in their work, and for the help which they give in the printing and publishing of these notes.

The cover design for this issue was drawn and cut by Forrest Fulton.

Walter Heil - Ranger Naturalist

#### THE BLUE JAY.

Here in Yosemite there are many birds. I think that the most interesting of them all is the Blue-fronted Jay. He likes to pick up bright colored things such as thimbles, pins and rings. His song is sometimes "Thief, Thief, Thief" or "Jay, Jay, Jay".

One day as I was watching one of them I saw that he was carrying a peanut in his mouth. I was curious to know what he was going to do with it, so I watched him. He was looking for a spot to make a hole. When he found the right spot, he buried the nut. He then flew into one of the trees and stayed there. After a while I went over to where the peanut was buried and dug it up. The Blue Jay then began to say "Thief, Thief, Thief".

Betty Jane Wiseman Age 11  
Berkeley, California



A BABY GROSBEAK.

Around our camp there was a baby Grosbeak. My brother picked him up and fed him. He was probably knocked out of the nest by his mother. We wrapped him up in a wool sweater but the next morning he was dead. My mother said, "He was probably sick".

I felt very sad about the poor little fellow.

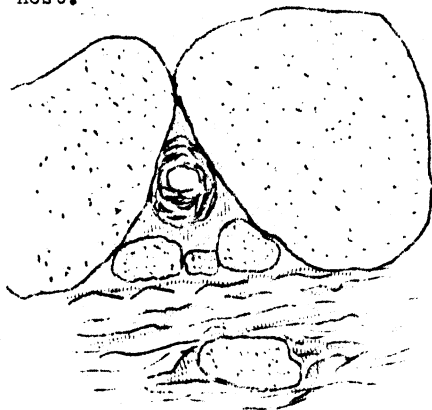
Barbara Good Age 10  
Oakland, California

# FOUND. A WATER OUZEL'S NEST.

We had heard a good deal about the Water Ouzel, so we all wished to see one and to look at its strange nest. Thursday, July twenty-first, Mr. Hoil asked the members of the Junior Nature School if they would like to go to Snow Creek and attempt to find either the birds or their nest. About thirty people responded and met at Mirror Lake in the afternoon.

All that were going had arrived by 2:15 and we started our short hike (in cool weather?). We walked a mile or so to the base of the falls and sat down to cool off. (Only one boy fell in.)

Soon we turned around and started back. After going a few yards, Mr. Hoil heard the crying of the baby Water Ouzels. By climbing on the rocks in the middle of the stream and looking in various places, the nest was found hidden in the rocks near the water. Although it was pretty dark in the nesting place, we could see the nest which was built of moss and the heads of the baby birds peering out through the opening in the nest.



Mr. Hoil was helping the smaller children try to see the nest, when both parent birds arrived, bringing food for the young. We stopped back a few feet so that they might come to their nest. They did not pay much attention to us, but instead went right into the rocks to feed the babies. When they came near the nest, the babies began to cry at the tops of their voices again.

After taking a good look at the nest, and watching the parent birds for awhile, we started back towards Mirror Lake. It was a sight which we can not often see so we were all glad that we went.



According to Mr. Hoil, this nesting is probably a first nesting and, if so, it is quite likely a late nesting record for Yosemite.

Adole Wiebalk Age 14  
San Francisco, California

## YOSEMITE. (Tune: Parlez-vous)

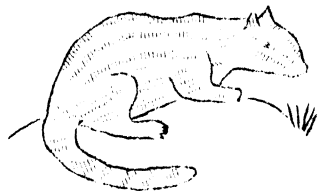
- Y. is for the yearly trips we hope to take,
- O. is for the oval cakes I saw Ta-bu-co make.
- S. is for the streams that flow down from the land of drifted snow.
- E. is for the Eagle flying in the sky,
- M. for Mirror Lake which fast is going dry.
- I. is for Illilicette whose waters leap from high.
- T. is for the trails we take, that wind and wind,

Where we got knowledge which we'll store within our minds.

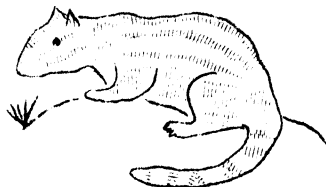
- E. is for El Capitan which holds the secret of ancient man,

And thus we spell Y-C-S-E-M-I-T-E.

Nancy Jean Lee Olney Age 9  
Seal Beach, California.



## JUNIOR NOTES



### PLANT GROWTH HALF WAY BETWEEN THE EARTH AND SKY

Rangers are liable to tell you anything. On a Nature walk I saw a grapefruit skin attached to an Inconse Cedar about ten feet above the ground. The Ranger told me it was some yellow fungus.

It looked like a quarter moon with one side attached to an Inconse Cedar. There were many others on other Inconse Cedars.

Rosemarie Armstrong Age 10  
Winters, California

### FLOWERS

Flowers, and I'll buy your posies your violets and roses, I'll buy your roses all sparkling with dew.

Wild, floworday.

Frieda Knoechli Age 7  
San Quentin, California

### AN INDIAN PAPOOSE

When I went to the Muscum ene afternoon, I saw a baby Indian. Her name was Beatrice, It was fat for a four month old baby. She had black eyes and lots of black hair.

The baby was being carried in a Hi-ki. That is what the Indian mothers carry their babies in. Her mother is one of the Indians that live in Yosemite.

Gladys Hanson Age 10  
Oakland, California

### THE BLUE JAY'S NEST

There is a Blue Jay nest in our camp. We have a feeding tray in one of our Western Yellow Pine trees. The mother bird comes down and gets lots of food for her babies. This morning I saw her taking a sun bath with her wings spread out.

Just now the mother bird is feeding her young.

Frank Higgins Age 10  
Santa Cruz, California

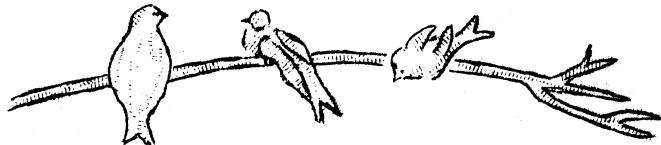
### A BIRD FEEDING TRAY

On one of the trees there is a bird feeding tray. The birds that feed there are the Blue Jays, Robins, and Grosbeaks and a Western Tanager. One day a Grosbeak hopped on the frying pan when it was hot but hopped right off and flew to the table. He got a whole piece of bacon and flew away.

Betty Lou Boyd Age 10  
Merced, California

We saw some deer and a live bear. We also went for a ride and saw the Yosemite Falls. We went up close to it. We also went up the Wawona Road to the tunnel, where we could see Half Dome, Clouds' Rost, Sentinel Dome and El Capitan. Then we drove through the Wawona Tunnel.

Vera Krone Age 7  
Hollister, California



Saturday, July 24, was the day on which Mr. Hoil and the members of the Junior Nature School decided that they would hike up the Pohono Trail. Saturday arrived, being a fairly good day, and nine of us met at the museum all packed up to go. We drove up to the Bridal Veil Falls parking area, parked the cars, and started up the Wawona Road.

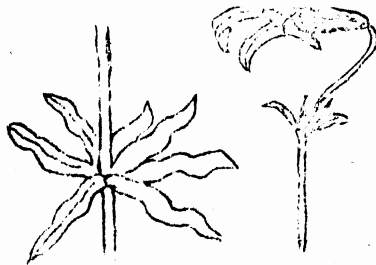
We left the Wawona Road and turned up the old Inspiration Point road, which was slightly dilapidated since the storm. We hiked on and reached Inspiration Point, where we left the roadway and started up the Pohono Trail. It was "some pain", but it was worth it, because we were on one of the most beautiful trails in the park.

On, on, on, until we came to a place where there were the remains of a bear which had died on the trail. Then we took a deer trail across to Old Inspiration Point, where there was a sheer drop. -"Gulp"- (It made me wish for wings as I looked down below.) Just beyond the point was Silver Strand Falls, while further on was Stanford Point which we set as our goal. We ate our lunch first, just above Silver Strand Falls in a little meadow which was beautifully in flower.

After lunch we went on to Stanford Point and had a wonderful view of the valley below. Coming down we watched the storm clouds gather in the back country and heard the distant thunder. The clouds gathered together in a black mass behind Clouds Rest, hiding all the rest of the back country. Clouds Rest was left silhouetted against the black sky, while the Sugar Pines, where we were, seemed to expand as if wishing for the rain to reach them.

When we again reached Inspiration Point, we continued on down the trail to the Wawona Tunnel and then to the cars.

The most interesting things seen on the trip were the views of the valley below, the flowers that were seen on the trip (especially the Washington Lily),



the finding of the dead bear, and, most of all, the beautiful voice of the Hermit Thrush that was heard on the rim of the valley.

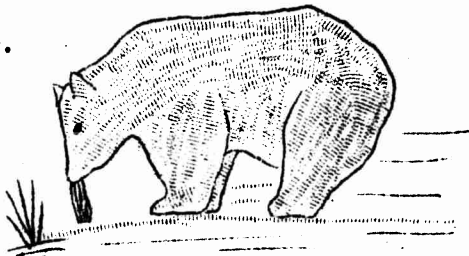
Nell Dognan Age 15  
Livermore, California

#### BEAR SONG. (Tune: My Bennie Lies Over The Ocean)

My bacon lay in brown paper,  
My bacon lay under my bed,  
Along came a great big Black Bear  
And stuck in his great big black head.

Chorus: Bring Back, Bring Back, Oh  
bring back my bacon to me, to me,  
Bring Back, Bring Back, Oh bring  
back my bacon to me.

He stuck his head in at the front  
flap,  
He stuck his head under my bed,  
He pulled out that package of  
bacon  
That lay under my little head.



I raised my head up from the  
pillow,  
I looked that bear straight in the  
eye,  
He turned and he ran like a rabbit  
And I began to sigh.

Ann and Bobette Robinson  
Ages 13 and 18  
Pacific Grove, California

## FORESTRY TEST FOR JUNIOR LEADERS.

Each year we, as Junior Leaders, have been asking for advanced tests. In previous years we have had mastery tests in Botany and Zoology. Last year we asked for a test concerning forestry and we were rewarded by having prepared for us a Forestry Mastery Test.

Our nation, we believe, should become forestry minded. This test will help us to achieve this aim and we, in turn, can help our friends and associates to also become forestry minded.

The citizens of the United States are drawing on our forests to such an extent that, today, we have very few virgin forest areas. There should always be an attempt made to replace what has been taken from any forest area. It is true that the government, on its own land, is controlling the forest areas so that they will not be denuded. The government can not do it alone, however, and it is necessary for the citizens to aid in seeing that forest lands are protected.

Without proper control this country could soon be without forest areas, so it is up to each one of us to see that more care is taken. If we had been more careful in the past we would not be troubled so much with disastrous floods and erosion of land which is so common today.

That is why we are glad to have this test, so that we will be more acquainted with the problems of forestry and thus be able to tell others about them and make them forestry minded.

Peggy Dognan Ago 17  
Livormore, California.

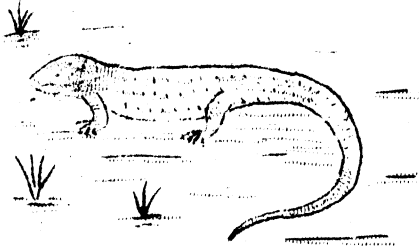
## VERNAL FALLS AFTER THE STORM.

When it stopped raining on Tuesday, July 26th, we started up the trail to Vernal Falls. As we walked along we came to a little spring and pool from which we had a cool drink. We made many stops where we could look up to the high cliffs above and down to the steep slopes of the river below. Before

reaching the edge, we got a very pretty view of Illilouette Falls tumbling down over the rocky slopes into the river.

The most beautiful sight was still ahead of us. As we reached the bridge we could hear the roaring of the water. We stood on the bridge and watched the water of Vernal Falls crashing and tumbling down over the rocks. I shall remember this picture for a long time.

Shirley Morgan Ago 10  
Oakland, California.



## LIZARD LORE.

One day, while with the Junior Nature School, we suddenly came upon a little animal running in the leaves. One of us made a quick grab for him but he was too fast. A look at him, however, showed that it was a lizard with a smooth, brown skin. It was a Skink and it was the first one I had ever seen.

Later, I went to the library to find out more about the Skink and learned the following facts.

In Yosemite, one of the most common lizards is the Skink. The true Skink lives in the dry sand. Its fingers and toes have spreading scales on them which help it to "swim" in the sand. If you drop it in the sand it will bury itself very quickly.

A hungry animal which wants the Skink for dinner may grab him by the tail. In such a case it merely drops its tail - which keeps jumping and squirming after the lizard has left it behind. By the time the enemy discovers how he has been fooled, the lizard has disappeared. The Skink will then proceed to grow a new tail.

-- Eleanor Endersboe Ago 17  
Washington, D. C.

FIRE - THE GREATEST ENEMY OF  
THE FOREST.

(While studying for the Forestry Mastery Test, I obtained the following information which was of interest to me.)

Our forests are exposed to destruction by many enemies, the worst of which is fire. 8,000 to 12,000 acres of forest are burned over annually by the devastating fires.

Forest fires may be started in many different ways. They are sometimes started by sparks or hot ashes from a locomotive. In the western states, particularly, many forest fires are the result of the lightning storms of the summer months. People in the south sometimes set fires in order to improve the grazing. Settlers and farmers who are clearing land often start big brush fires which frequently may get out of control. Campers, hunters, tourists and fishermen are responsible for many forest fires by neglecting to put out their campfires. Lighted cigars and cigarettes, carelessly thrown, are added causes for many of the fires.

A forest fire may destroy, in a few hours, trees that have required hundreds of years to grow. A heavy stand of timber may be destroyed in a few hours because of some carelessness.

There are several different kinds of forest fires. One kind may burn two to four feet beneath the surface of the ground. When the soil contains much peat, these fires may continue for weeks or months unnoticed. By flooding the area or digging trenches down to the mineral soil these fires may be put out.

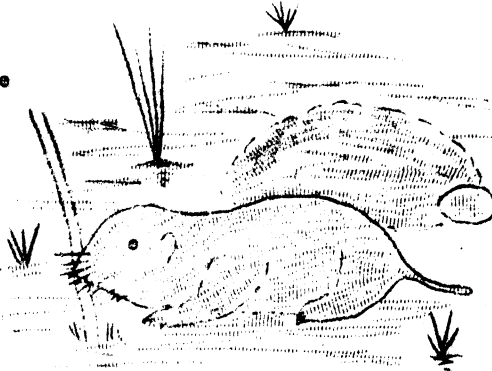
Wind plays a big part in the intensity of a forest fire. A shifting of the wind may cause a fire to change and get completely out of control after it is apparently stopped.

During the fire hazard season, extra forest guards are kept busy looking for any sign of smoke. The lookouts in their high towers, overlooking large areas of forest

land, watch constantly for any signs of fire. When fire is sighted, they report it at once to the nearest ranger station which, in turn, systematically goes about setting up control measures.

Seventy-five percent of all the forest fires are man caused, therefore, more caution should be used in leaving campfires burning or in dropping lighted cigarettes in order to insure our forests for many years to come.

Patsy Haughton      Age 15  
San Francisco, California



POCKET GOPHER

I saw a little pocket gopher

Who occupied the corner of a  
meadow.

He was timid and very nervous,

And afraid of his own shadow.

He nibbled the weeds and grasses,

And bit off a stalk of clover

And dragged it down into his burrow

He did this over and over.

He had four doors to his house,

And he wore a worried expression.

But he never came out the way he  
went in,

And never used the same door  
twice in succession.

- Donated.

## MOSSES AND LICHENS

As part of my work for the Botany Mastery Test, it was necessary for me to know the characteristics of mosses and lichens. (This article is mainly about lichens as they are the least known of the two plants.)

Lichens are made up of algae and fungi - two primitive plant growths. These plant growths attach themselves to trees and rocks, but they are not harmful to the trees to which they are attached. It takes a period of about fifty years for lichens to cover rocks because the process is so slow.

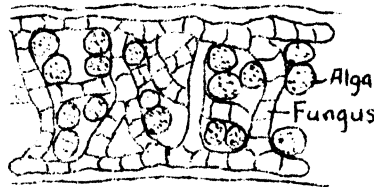
Although lichens may grow on bare rocks, mosses - on the other hand - never grow on rocks unless there is sufficient soil for them to obtain their supply of raw materials.

The algae are very important to the lichen, and make up the green part of the plant. Algae can not live without water, as they make their food from the water that they absorb and the carbon dioxide of the air - by a process called "photosynthesis". Water and carbon dioxide are combined in the green parts, or chloroplasts, in the cells of the plant to make starches and sugars. Protoplasm is the main part of the cell and is lined with the oval, green chloroplasts.

The fungus is more important than the algae in the growth of the lichen because of its ability to absorb great quantities of water. The fungus is a species of mold - closely related to the bread mold and the mushroom. Look at a piece of moldy bread - at the base of the moldy part - and you will see a tangle of fine white threads. The fungi in lichens are very similar to them.

Have you ever noticed how some mosses and lichens may be dried until crisp and brown, but still grow fresh and green again when rained upon? The explanation for this is that the fungi have the power to survive alternate drying and wetting. When

the lichen is rained upon the fungus which grows over and surrounds the green part, or algae, swells and becomes more or less transparent, so that the green algae show more plainly. The fungi and algae are, in reality, combined to make one plant - the lichen.



Cross-Section of a lichen

Lichens <sup>grow</sup> singly or in groups and each plant branches out like the coral. One of the most common types of lichen is named the "Staghorn Lichen", so-called because the plant structure is pronged like a stag horn. This is the plant which is commonly called "Spanish Moss" or "Spanish Lichen" and it is a lichen. The true Spanish Moss, however, is neither a moss or a lichen, but a green flowering plant that hangs gracefully down from the limbs of a tree. It grows mainly in tropical and subtropical places, while the Staghorn Lichen attaches itself to trees in abundance throughout the Yosemite region.

Lichens can be told from mosses by the presence or absence of leaves. Lichens have no roots or leaves, while the mosses are leafy, grow in bright green clumps, and bear spores in cups or capsules. These cups have lids on them, which fall off when the spores are mature and allow them to make their escape.

This type of plant growth is very interesting to study and worth knowing. Therefore, learning these things about lichens has made my work, as a member of the Yosemite Junior Nature School, much more enjoyable. The taking of advanced tests in the school helps me in my regular school work and aids me to understand nature.

Adele Wiobalk      Age 15  
San Francisco, California.



The second campfire for the summer was held on Friday night, July 22, on the beach near Camp 6. Thirty young people were in attendance and enjoyed the evening of songs, game and talks.

Raymond Howard, as part of his work in passing the Junior Leader Test, introduced a game of identifying leaves by their feel. The group was divided and each group gave nature charades - by enacting a skit - the answer to which was an animal, plant or point of interest found in Yosemite.

The following people gave talks as part of their work in passing the various tests; Raymond Howard, Nell Degnan, Peggy Degnan, Adele Wiebalk, Eleanor Nelson, and Patsy Haughton.

The evening's program ended with most of the people toasting marshmallows, after the meeting had been officially adjourned by singing 'Goodnight-O-Campers'.

#### -AWARDS-

Additional awards for the summer have been given to the following people: Junior Awards to Betty Jane Wiseman, Rosemarie Armstrong, Margaret Heyler, Billy Heyler, and Carla Koerner; Senior Awards to Louise Doty, Buddy Heyler, and Peggy Graham; Junior Leader Awards to Raymond Howard, and Ann Robinson; Forestry Mastery Awards to Eleanor Nelson, Patsy Haughton, Adele Wiebalk, Nell Degnan, Peggy Degnan, and Ann Robinson; Zoology Mastery Award to Jack Lowrie; and Botany Mastery Award to Helene Howard.

In Yosemite, at the Nature School, I have learned about the many different trees and also about birds and flowers.

Bob Dewitt Age 8  
Vallejo, California

Yosemite is a fine place to come to. I come here every summer for one month. I like the days because they are warm and you can swim. I like to go to the campfires each night.

Clarence Britell Age 8  
Hollister, California.

In the Forestry Mastery Test you have to know a good deal about forest fires. You should know the ways in which they start, the way they are reported, and the ways that they are fought.

Forest fires are reported somewhat differently than fires in towns are reported. The man in the Lookout Tower is responsible for spotting most fires. He gets the direction of the fire and marks it out on his map. His map is marked with circles around each lookout station, and these are marked in degrees.

After determining the number of degrees on his map, he telephones this information to fire headquarters, giving them the approximate location. The one who receives it, then telephones the C. C. C. camp or other available source of fire fighters, nearest the fire and give instructions.

Each man sent out on fire duty has certain equipment. His rations consist of - one can of Pork and Beans, one loaf of brown bread, one jar of preserves, one can of meat, and one can of tomatoes. They are also supplied with fire fighting equipment, such as, rakes, axes, shovels, electric torches, and chemical fire fighting equipment.

The C. C. C. organization should be given much credit for their work in fighting forest fires.

Ann Robinson Age 13  
Pacific Grove, Calif.

I like Yosemite very much. I come every year. I like rangers because they are so nice. I have enjoyed nature school and have learned many new things.

Clarice Brittoll Age 8  
Hollister, California

A ranger is very helpful. He teaches us about trees, birds, and animals. Rangers tell us about mountains, water falls, glaciers, and many other helpful things.

Lillian Mlcoch Age 10  
Martinez, California.